

CMOS SENSOR CAMERA  
WITH ON-CHIP IMAGE COMPRESSION

ABSTRACT OF THE DISCLOSURE

A digital camera (10) that has an array (11) of CMOS  
sensor elements (11a). The array (11) is read in a  
manner that performs spatial-to-frequency transforms for  
5 image compression on the analog output signals of the  
sensor elements. More specifically, wordlines (12) and  
bitlines (13) are pulsewidth modulated so that the  
coincidence of their "on" times corresponds to a desired  
coefficient of the basis function of the transform  
10 (FIGURES 3 and 4). Additional comparator circuitry (15),  
quantizers (16), and encoding circuitry (19) can be part  
of the same integrated circuit as the array (11).